DOCUMENT RESUME

ED 463 097 PS 030 251

AUTHOR Bruno, Kristie; England, Eileen; Chambliss, Catherine
TITLE Social and Emotional Learning Programs for Elementary School Students: A Pilot Study.
PUB DATE 2002-00-00
NOTE 32p.
PUB TYPE Reports - Evaluative (142)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Affective Behavior; Anger; Antisocial Behavior; *Behavior Change; Change Strategies; Grade 3; Identification; Primary Education; *Program Effectiveness; *Social Cognition; *Young Children
IDENTIFIERS Emotional Intelligence

ABSTRACT

This study applied the theoretical frameworks of emotional and social intelligence to the development and implementation of an education program for elementary school children. The key component in strengthening emotional intelligence involves the correct identification and understanding of internal physiologically anchored emotional states and of the situations that elicit them. In contrast, the key component in strengthening social intelligence involves understanding of emotions, and therefore, both emotional and social intelligence are interdependently related. To enhance emotional and social intelligence, a year-long program consisting of five units (Listening, Feelings, Anger Management, Decision-Making, and Perspective-Taking) was devised and implemented in two third-grade classrooms in a suburban elementary school in the northeastern United States. The program was administered on a weekly basis and was under the supervision of a guidance counselor. The effectiveness of the program was assessed through a within-subject analysis of pre- and post-test measures of emotional identification, pro-social and anti-social responding, anger management strategies, and a teacher rating scale. Findings provide partial support the hypothesis that the program would enhance students' capacity to identify emotional states accurately. Findings, however, fail to support the hypothesis that participation would increase pro-social responding and reduce anti-social responding. (Contains 31 references.) (HTH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 463 097

# Social and Emotional Learning Programs for Elementary School Students: A Pilot Study

Kristie Bruno

Eileen England, Ph.D.

Catherine Chambliss, Ph.D.

Ursinus College

2002

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Catherine Chambliss

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



PS 030251

BEST COPY AVAILABLE

**Abstract**

The purpose of this study is to apply the theoretical frameworks of emotional and social intelligence to the development and implementation of an education program for elementary school children. As defined by Daniel Goleman (1995), emotional intelligence entails a variety of abilities that are essential in securing and maintaining a healthy life. For instance, being aware of what triggers anger is integral to learning how to manage it in an effective way. The key component in strengthening emotional intelligence involves the correct identification and understanding of internal physiologically anchored emotional states and of the situations that elicit them. On the other hand, social intelligence involves the intricate knowledge and understanding of social interactions and people. Accurately assessing people's reactions in social interactions and reaching positive interpersonal outcomes is the hallmark of social intelligence (Kelly & Moon, 1998). The key component in strengthening social intelligence involves the understanding of emotions, and therefore, both emotional and social intelligence are interdependently related. The development of social intelligence can not occur in the absence of emotional intelligence and the best indicator of emotional growth lies in the continued development of the social being. To enhance emotional and social intelligence, a year long program consisting of five units (Listening, Feelings, Anger Management, Decision-Making, and Perspective-Taking) was created. The program was administered on a weekly basis and was under the supervision of the guidance counselor. The effectiveness of the program was assessed through a within-subject analysis of pre- and post-test measures of emotional identification, prosocial and antisocial responding, anger management strategies, and a teacher rating scale.

# Social and Emotional Learning Programs for Elementary School Students: A Pilot Study

For the past two decades there has been an increasing awareness of emotional development. In attempting to understand emotional development, researchers have begun to focus on emotional intelligence. As defined by Daniel Goleman (1995), emotional intelligence entails a variety of different abilities that are essential in creating and sustaining a healthy life. For instance, being able to control anger will inevitably help a spouse to maintain a happy marriage. Beyond the ability to manage anger, emotional intelligence is a complex and internal mechanism regulating the self. There are three elements that enable this internal mechanism to function properly. The first part involves self-awareness of internal physiological emotional states. From this process of self-awareness comes the second part, cognition. Cognition includes correctly identifying and understanding internal physiological emotional states and the situations that provoke those states. From this process of cognitive self-awareness and recognition comes the third part, self-management. Self-management focuses on the verbal and nonverbal expressions of emotional states.

One significance of emotional intelligence is that it permits the development of social intelligence (Kelly & Moon, 1998). Social intelligence involves the intricate knowledge and understanding of other people and their social interactions. Accurately assessing peoples' reactions in social contexts and facilitating positive social outcomes is the hallmark of those with high social intelligence (Kelly & Moon, 1998). The operation of social intelligence involves a complex interaction between multiple factors. For example, the level of intimacy in a personal relationship interacts with other variables to determine the optimal response. To illustrate, walking away from an escalating situation involving two unfamiliar participants at a party reflects strong social intelligence. In this situation, the outcome is positive because the participants who do not have an intimate or established relationship between them leave the confrontation without physical and emotional scars. However, walking away from a significant other during a party reflects weak social intelligence. In this situation, the outcome is negative because the intimacy of the relationship becomes jeopardized by this action and both participants may be emotionally injured.

Both emotional and social intelligence are interdependently related. Emotional intelligence is a mechanism regulating the internal experience of the self and social intelligence is a mechanism regulating the external world of interpersonal relationships. The development of social intelligence can not occur in the absence of emotional intelligence and the best indicator of emotional growth lies in the continued development of the social being. Simultaneously, effective social interaction can facilitate emotional awareness and control by providing practice with a wide range of emotion-provoking situations. The present discussion examines the theoretical frameworks of emotional and social intelligence in an effort to further understand the relationship between the two.

To understand the complex relationship between emotional and social intelligence, each must be treated as a distinct and separate concept. Because emotional development is the precursor to social development, emotional development will be

discussed first. In the early months of life, infants respond reflexively to the presence of unpleasant and distressful environmental stimuli (Kopp, 1989). With time, infants develop purposeful psychomotor responses and use these new responses to communicate negative as well as positive emotional experiences. As suggested by prior research, the significance of early physical reactions to both positive and aversive stimuli is that these reactions remain with the infant and serve as lifelong devices (Greenberg, Kusche, Cook, & Quamma, 1995). The initial onset of emotional development therefore involves a variety of physical reactions to the environment.

Following the earliest physical reactions to emotion-provoking stimuli, emotional development proceeds to interactions with adults' modeling of emotions. During the first two years of life, children become aware of different facial expressions and responses of their caregivers (Kopp, 1989). Effective parental modeling of emotional expression will lead children to experiment with expressing different emotions. As they practice, children learn about various emotions as well as the situations that commonly elicit different emotions (Denham, Zoller, & Chouchoud, 1994).

The emotional information that children receive becomes encoded for future use. As children recognize and discriminate among different emotions, they learn to control or alleviate distressful stimuli (Kopp, 1989). For example, they might learn to manipulate objects as a means to control stress. As mentioned earlier, these behaviors become learned and reappear later on in life as the individual encounters relevant situations. To illustrate, children might learn to squeeze play-doh when they become angry. As adults, the play-doh is replaced with a stress ball. Much as toddlers might suck on a pacifier to calm themselves, adults might suck on cigars and/or cigarettes. Manipulating objects may become an enduring strategy for regulating tension that is expressed differently over time.

Around the age of two, children begin to speak, providing powerful new tools for emotional expression. The process of language acquisition permits children to begin to identify their emotional states verbally. In other words, children learn to attach labels to different emotional states (Greenberg, Kusche, Cook, & Quamma, 1995). Labeling emotions is accompanied by an increase in the understanding of the presence of emotions in various situations (Wintre & Vallance, 1994). Children begin to use emotional information as a tool in interpreting situations. They can now utilize these verbal methods to express themselves which will often help them get what they want (Kopp, 1989).

Throughout the preschool years, children continue to learn how to identify emotions as well as how to understand the causes of emotions for various situations. At the beginning of the preschooler period, children typically use ineffective methods of expressing emotions. For instance, frequently temper tantrums result from the inability to cope with anger, competition, rivalry, and adult discipline or instruction (Kopp, 1989). However, more exposure to social interactions allows children to discuss their emotions. Talking more about emotions leads to understanding one's own and another's emotions. This understanding is enhanced through the social interaction. The emotional child verbally expresses his/her emotions and receives feedback concerning the validity of those emotions. Providing and receiving feedback creates an opportunity to infer a causal

relationship between the event and the resultant emotion, both in self and others (Denham, Zoller, & Couchoud, 1994).

A critical period in emotional development occurs between the ages of five and eight. During this period, children are continuing to work on their understanding of their own emotions as well as the emotions of others. Furthermore, children are now beginning to recognize the simultaneity of emotions that occurs in situations (Wintre & Vallance, 1994). This increase in emotional understanding leads to self-management and regulation of emotions. Self-management is the ultimate skill indicating high emotional development. When children effectively manage their emotions, they can create positive social outcomes with peers and adults (Greenberg, Kusche, Cook, & Quamma, 1995). In other words, effective self-management of emotions advances social development.

However, not all socialization experiences are positive. Previous studies have demonstrated that within the family setting, parents are more likely to discuss emotions with their daughters than with their sons (Goleman, 1995). Given that girls use language more frequently than boys, these discussions provide girls with more clearly emotional labeled experiences. Talking about their feelings with others increases their resources for managing their feelings. Girls learn how to change how they are feeling by manipulating language. In contrast, boys might be less able to employ these strategies and therefore resort more often to ineffective methods such as aggression (Goleman, 1995).

Another type of differential socialization experience that might influence emotional development in a negative way involves adults' modeling of emotions. To illustrate, if children observe parents' responding with verbal and physical violence toward others, then children may encode these responses as proper ways to express anger. Later on, when children are confronted with escalating anger situation in an interpersonal relationship, they may respond to the situation in an aggressive and violent manner. Although violent responses might not develop every time children observe violent behavior, continuous and repeated exposure to violent episodes increases the likelihood that children will respond with violence when provoked. Therefore, parental insensitivity to emotional nuances or modeling of inappropriate emotional responses hinders necessary emotional growth by reducing the children's ability to correctly identify and label emotions and to develop socially appropriate responses.

In summary, emotional intelligence is an internal mechanism important for regulating the self. This internal mechanism relies on three key parts: self-awareness, cognition, and self-management. Self-awareness starts with reflexive and physical responses to both unpleasant and pleasant environmental stimuli and moves to growing awareness of these internal emotional states.

The second key part is cognition. Cognition can be divided into three levels. The first level involves children's recognizing and discriminating among different emotions. Effective parental modeling and encouragement helps to promote the advancement into the second level. The second level is the verbal identification of emotional states. As language develops, children begin to attach labels to emotional states. The third and final level of cognition involves understanding the situational causes of different emotions.

The third element of emotional intelligence is self-management. Being able to manage one's emotions effectively will promote positive social outcomes with both

adults and peers. In other words, self-management is a process whereby the correct identification of emotional states enables the individual to select socially appropriate responses. Conversely, negative social outcomes are a by-product of not being able to correctly identify emotional states and/or select socially inappropriate responses.

Because emotional development is a life long process, visualizing emotional intelligence as existing on a continuum will enhance our understanding of it. Placement on the continuum depends on the impact of various external factors. These factors can either advance emotional development or impede it. Although emotional intelligence develops at different rates among individuals, ensuring a healthy life depends on increasing self-awareness and executing effective self-management strategies.

Emotional intelligence contributes to the development of social intelligence. In order to empathize with others' emotional states, it is important to have a coherent understanding of one's own emotional range. The ability to predict and manipulate others' responses depends upon one's grasp of their likely response to different events. This knowledge is based on generalizations from one's own reactions to a wide range of circumstances. Social intelligence first requires the process of social awareness. This process of social awareness centers around encoding external and situational cues. The second part involves cognition. Interpreting external and situational cues, considering social goals, and deciding on a course of action are the essential features comprising this cognitive process (Erdley & Asher, 1996). The third element of social intelligence involves behavioral responses. Behavior entails verbal and physical expressions that occur during social interactions.

The initial onset of social development occurs with the early attachment between parents and their newborns. As defined by John Bowlby, attachment is the process through which positive and heightened emotional bonds are formed (Weiten, 1998). In the early months of life, infants use reflexive and physical gestures such as smiling, gazing, and cuddling to attract and maintain their parents' attention (Newman & Newman, 1997). Infants also become aware that during times of distress, parents will respond to their signals to comfort and protect them (Newman & Newman, 1997). Evidence suggests that positive and secure attachments to their caretakers benefit infants by paving the way for future positive and close relationships with peers (Weiten, 1998).

Following attachment, social development proceeds to the modeling of adult behaviors. During the first few years of life, children observe and imitate the behaviors that they see displayed by adults, particularly parents. Altruism and aggression are among the behaviors that children observe and imitate (Newman & Newman, 1997). In addition to the behaviors themselves, children also keenly observe the aftermath of various behaviors. For example, what consequences does the model encounter for helping an elderly woman carry her groceries? Or, what consequences does the model encounter for fighting someone? Depending on the consequences, children may choose either to imitate the behavior or not.

During the preschool years, children continue to become aware of others as they develop the ability of perspective-taking (Greenberg, Kusche, Cook, & Quamma, 1995). Perspective-taking is the ability to understand another person's thoughts and feelings. Understanding the thoughts and feelings of others guides children in social interactions

by allowing them to infer causal relationships (Santrock, 2001). Throughout the preschool years into the elementary years, children face numerous social "challenges," such as the school setting itself, developing friendships, and gaining acceptance into peer groups (Greenberg, Kusche, Cook, & Quamma, 1995). Embracing these new social roles promotes positive social development.

A critical period in social development occurs between the ages of six and twelve. During this period, children further develop their perspective-taking skills. For example, children recognize that the other person may have thoughts and feelings that are different from one's own thoughts and feelings, and that both parties influence each other during the social interaction (Santrock, 2001). Because they can more accurately process emotional and social cues during this period, children can maintain more positive relationships. Relationships remain intact because children learn how to predict the other person's emotions and behaviors. Prediction leads to adjusting one's behavior accordingly (Denham, Zoller, & Couchoud, 1994). In other words, children develop social-cognitive strategies to help monitor their behavior and the behavior of others during the course of the social interaction. As children get older, these strategies become more stable and complex and children become more skilled at using them (Dodge & Price, 1994).

Although understanding how perspective-taking skills develop is important in understanding social development, another important component of social development involves how children begin to identify and consider the social goals that they will pursue. In general, social interactions are unstructured. Therefore, children must learn how to interpret social cues and select goals that they believe will help guide them during often ambiguous social interactions (Erdley & Asher, 1996).

Prior research has classified three types of social goals: prosocial, antisocial, and withdrawn. Aside from individual differences, selecting social goals plays an important role in shaping behavior. In a 1996 study, Erdley and Asher found that self-efficacy was involved in the goal selection process. For example, children who believed that they can implement prosocial goals to resolve a problem with a friend, tended to respond to the situation in a prosocial manner. In resolving social problems, children who adopt prosocial strategies accurately process relevant social cues and adjust their behavior accordingly (Dodge & Price, 1994).

However, social interactions do not produce positive experiences for all children. Three decades ago, Spivack and Shure (1989) noted that isolated and rejected children had difficulty in social cognition and problem-solving. As a result, those children were unable to interpret a social interaction because they did not understand the motives, thoughts, feelings, and behaviors of others, nor could they consider the consequences of socially inappropriate behaviors (Battistich, Solomon, Watson, Solomon, & Schaps, 1989).

Studies have also revealed that aggressive children do not accurately perceive and interpret relevant social cues, and therefore, they display fewer socially appropriate responses (Dodge & Price, 1994). Furthermore, aggressive children are biased in interpreting hostility (Erdley & Asher, 1996). As a result, aggressive children often become violent because they do not recognize accidents and instead attribute

intentionality to all actors that frustrate or harm them. Finally, aggressive children believe that they are more capable of resolving a situation by employing antisocial methods over prosocial ones (Erdley & Asher, 1996).

In summary, social intelligence regulates responses to the situational demands of relationships. This mechanism depends on three key parts: social awareness, cognition, and behavioral selection. Social awareness begins with infant attachment to their caretaker and proceeds with children's imitations of adult social behaviors. The observed consequences of adult responses may either prompt children to imitate the behavior or not. Cognition involves the interpretation of cues and deployment of perspective-taking skills. The cognitive component of social intelligence also includes consideration and selection of social goals which is influenced by the beliefs that children have regarding their likelihood of achieving desired social outcomes. For instance, children will decide and use prosocial goals if they believe that they can achieve those goals in a social interaction. The final element of social intelligence involves verbal and nonverbal behavioral expressions that occur during social interactions. Social awareness and cognition strongly influence the behaviors of both participants during the social interaction.

Because social development is a life long process, visualizing social intelligence as existing on a continuum will enhance our understanding of it. An individual's placement on the continuum depends on the impact of multiple factors. Although social intelligence develops at different rates among individuals, establishing positive and enduring social relationships depends on increasing social awareness, understanding beliefs, and behaving in socially appropriate ways.

Although emotional and social intelligence can be treated as distinct and separate concepts, in actuality emotional and social intelligence evolve jointly. To illustrate, the initial onset of both emotional and social intelligence occur in the first few months of life. An infant reflexively responds to adverse and distressful environmental stimuli (Kopp, 1989). Following the infant's response, a caretaker comes and comforts the infant. Thus, emotional intelligence is indicated by the infant's reflexive response to the unpleasant environmental stimuli and social intelligence is indicated by the caretaker's action to comfort the infant (Newman & Newman, 1997). As emotional and social intelligence evolve together, the individual begins to simultaneously process emotional and social information. This simultaneous process is made possible by three overlapping components: awareness, cognition, and behavior. Because these three components are contained in both emotional and social intelligence, their interactions help to explain the interdependent relationship between emotional and social intelligence.

To understand the interdependent relationship between emotional and social intelligence, it is useful to consider each overlapping component. The first overlapping component involves awareness. While emotional intelligence is concerned with self-awareness of emotions, social intelligence is concerned with social awareness. However, both types of awareness occur concurrently within a given situational context. For example, children carefully observe adults, especially their parents. If dad comes home with a smile on his face and a surprise present for mom, the child will associate this event

with the feeling "happy." In addition, the child will encode and interpret mom's reaction to dad as a socially appropriate response.

The second overlapping component involves cognition. As mentioned earlier, cognition in emotional intelligence entails correctly identifying and understanding physiological emotional states and the situations that provoke them. In contrast, cognition in social intelligence entails interpreting external situational cues, considering social goals, and deciding on a course of action. Similar to awareness, both types of cognition occur in a given situation. To illustrate, while running around the playground with Francis, Scott falls and becomes angry. Because Scott experiences anger and he has interpreted Francis's contributory action to be intentional, Scott is likely to make the decision that the best way for him to deal with the situation is to push Francis to the ground. On the other hand, if Scott interprets Francis's action to be accidental, Scott is likely to make the decision to walk away from Francis without verbally or physically hurting him.

The third overlapping component involves behavior. In regards to emotional intelligence, behavior centers on the self-management and internal regulation of emotions. Conversely, in social intelligence, behavior focuses on the outward verbal and physical expressions that occur during social interactions. Similar to the other two components, both types of behavior occur simultaneously in situations. For example, Kelly is happy that she just won the starring role in a play. However, her best friend, who also wanted the part, is sad that she lost and is crying. Because her best friend is upset, Kelly must control her happiness and comfort her friend.

Although emotional and social information can be processed simultaneously, this simultaneous processing does not happen all the time. When people are confronted with new experiences, they may have to invest considerable energy in order to carefully identify and analyze the incoming emotional and social information. To illustrate, while visiting universities high school students may become overwhelmed by all the incoming emotional and social information. As such, high school students must spend some time thinking about their experiences and listing the advantages and disadvantages associated with each university in order to make a sound judgment. These new experiences force the students to consciously evaluate emotional and social information. In contrast, common experiences allow individuals to unconsciously and automatically process emotional and social information.

In summary, emotional and social intelligence evolve together. Both emotional and social intelligence have three basic components: awareness, cognition, and behavior. The interactions between these three components demonstrate the interdependent relationship that exists between emotional and social intelligence.

*Descriptive Studies*

Early research on emotional development focused on emotional displays of infants in response to environmental stimuli. Within the first few days of life, infants react to the presence of unpleasant or distressful stimuli by engaging in reflexive behaviors such as turning their heads (Kopp, 1989). However, as infants develop, they begin to use facial expressions to convey their emotional states. To illustrate, Izard (1995) found that two to three month old infants could reliably produce facial expressions for anger, interest, surprise, and sadness. Researchers have also manipulated the infant's environmental to elicit a particular emotional response. For example, researchers elicited anger in seven-month-old infants by offering them a teething biscuit and withdrawing the biscuit when the infants tried to reach for it (Parke & Locke, 1999). Finally, infants convey their emotional states through gestures and body language. For instance, studies have demonstrated that infants communicate happiness by wriggling their bodies. Conversely, infants communicate distress by turning away, kicking, and bringing their hands to their mouths (Hyson, 1994). To conclude, one critically important research area in emotional development entails investigating how infants became aware of emotional states through their interactions with environmental stimuli.

Infants continue to develop awareness of emotional states through parent-infant interactions. Early findings suggested that infants between three to nine months develop an awareness of different emotional states by observing parental responses, especially their facial expressions (Kopp, 1989). To illustrate, Malatesta & Haviland (1982) found that mothers who frequently smiled often had infants who smiled a lot (Hyson, 1994). Conversely, Haviland & Lelwica (1987) discovered that parents diagnosed with affective disorders had infants who showed muted and depressive expressions (Cassidy, Parke, Butkovsky, & Braungart, 1992). In summary, infants observe and imitate emotional displays as expressed by their parents.

Children also learn to recognize and discriminate among different emotions through parental verbal expressions of emotional states. To illustrate, Denham, Zoller, and Couchoud (1994) studied emotional understanding through maternal-child interactions after a free play period. Mothers were asked to display various emotions and to discuss emotional photographs with their children. Thus, emotional understanding was measured through the children's reactions to their mother's emotional expressions as well as their reactions to the discussion of emotional photographs. Results indicated that children whose mothers used more emotional language during simulations and who showed fewer negative responsiveness, developed greater emotional understanding than children whose mothers demonstrated more negative responsiveness such as anger. Finally, more boys were affected by their mother's negative responsiveness as compared to girls (Denham, Zoller, & Couchoud, 1994).

Besides influencing children's level of emotional understanding, parental expressiveness of emotional states also appears to influence the quality of their children's peer relationships. Cassidy, Parke, Butkovsky, and Braungart (1992) sampled kindergarten and first grade students from various public schools in the Midwest.

Children were predominately Caucasian and came from middle class households. To examine the effect of parental expressiveness on the quality of peer relationships, researchers analyzed three variables: peer acceptance, emotional expressiveness in the home, and observed parent-child emotional expressiveness. In order to assess peer acceptance, researchers interviewed classmates and asked them if they liked to play with the participant. Maternal reports were used to measure the emotional expressiveness in the home. Parent-child emotional expressiveness was assessed through videotaped recordings of mothers interacting with their child during a game. Overall, maternal reports of emotional expressiveness in the home and maternal expressiveness during the game were related to the quality of peer relationships. In other words, high emotional expressiveness was related to children being more accepted by their peers.

Research on the effects of parental expressiveness on the quality of peer relationships continued with Jenkins (2000). Jenkins investigated the effect of marital conflict in the development of childhood anger and aggression. Participants were in grades kindergarten, first, and second and came from three public schools and one private school in a Canadian city. During recess, children were observed and anger responses were recorded (i.e., facial expressions, tone, and gestures). Additional data was gathered through maternal, teacher, and peer ratings. Specifically, mothers and teachers reported on the child's emotional and problem behaviors. Peers rated the frequency in which the child became angry and fought. Consistent with prior research, findings revealed an association between anger based marital conflict and increased childhood anger and aggression as rated by mothers, teachers, and peers. To conclude, parental expressiveness can influence children's emotional understanding and the quality of their peer relationships.

Research emotional cognition concentrates on how children process and understand emotional information. One important element in this gradual process involves correctly recognizing and identifying emotional states. To learn how children come to recognize and identify emotional states, Custrini and Feldman (1989) examined children's ability to accurately encode and decode facial expressions. Participants ranged in age from nine to twelve and came from two public elementary schools in a Northeastern town. Prior to administering treatment, mothers completed a social competence questionnaire. Scores were then used to divide children into two groups: high and low social competence. Children were shown a series of video clips in which someone was expressing one of five emotions: happy, sad, fear/surprise, anger, and disgust. After viewing the clips, the children were then asked to identify the specific emotion that the character was expressing. Following their responses, children were then asked to view and identify the particular emotion expressed by someone reacting to the same video clips previously shown to the children. Results indicated that children high in social competence were more accurate in encoding and decoding facial expressions as compared to children low in social competence. Finally, happiness was the easiest emotion to encode and decode whereas anger was the most difficult emotion to encode and decode.

Another study investigating children's ability to correctly identify emotional states was by Wintre and Vallance (1994). Besides assessing children's ability to identify emotional states, Wintre and Vallance also examined self-reports on multiplicity, intensity, and valence of emotional experiences. Children from two public day care schools and two junior public schools participated. Ages ranged from four to nine. Children were predominately Caucasian and came from middle-class households. To assess emotional identification, children were individually administered the Emotions Situations Questionnaire. The questionnaire contained fifteen situational sentences with three sentences devoted to each of the following emotions: happy, sad, scared, loving, and anger. After each sentence, the children were asked to respond how they would feel if they were the character in the situation and why they would feel a particular way. To measure multiplicity, intensity, and valence of their emotional experiences, children were asked to move beads along a wooden apparatus. Overall, the ability to identify emotions as well as multiplicity, intensity, and valence of emotional experiences increased with age. Gender differences also emerged with more females identifying emotional states than males. In a similar study conducted in 1990, Wintre, Polivy, and Murray found gender differences among reports on the intensity of emotional experiences with males reporting more varied, but less intense emotions as compared to females who reported fewer, but more intense emotional experiences. Finally, happiness and sadness were the easiest emotions to identify as opposed to anger and loving which were the hardiest emotions to identify (Wintre & Vallance, 1994).

Besides exploring age and gender differences in children's ability to correctly identify emotional states, researchers have also explored differences among regular and special education students. Cook, Greenberg, and Kusche (1994) examined differences in emotional understanding and disruptive behaviors among first and second grade students from a West Coast metropolitan area. A majority of the students were classified as regular education students. Special education students were classified according to various impairments such as severe behavioral disorders, health impairments, and learning disabilities. Furthermore, children ranged in age from six to ten with eight being the average age. To measure emotional understanding, children were individually interviewed and asked to provide examples of ten specific emotional states (happy, sad, anger, scared, loving, proud, guilty, jealousy, anxious, and lonely) that ranged from simple to complex. In addition, children were asked to identify these emotions in themselves and in others. Disruptive behaviors were assessed through maternal reports of aggression and other external behavior problems. Individual scores were then divided into three levels: low, moderate, and high. Findings revealed that emotional understanding and experience declined as the level of behavioral problems increased. Children who scored high in behavior problems were less likely to discuss both simple and complex emotions as well as identifying their own emotions and the emotions of others. Finally, Cook, Greenberg, and Kusche discovered that more girls provided emotional examples as compared to boys.

Beyond investigating children's ability to identify emotional states, researchers have also been interested in examining how children come to understand situational determinants of emotional experiences. Several studies have shown that preschool and

early elementary school students can identify situations that elicit happiness, sadness, anger, and scared. Furthermore, numerous studies have documented that as children get older, they can identify situations that elicit more complex emotions such as pride, guilt, shame, jealousy, and worry (Hubbard & Coie, 1994).

Of particular interest to researchers are the factors that influence situational knowledge of emotional experiences. For example, Denham, Zoller, and Chouchoud (1994) investigated age and cognitive-language ability as potential factors influencing the development of situational knowledge of emotional experiences. Participants were preschool children from a large metropolitan area. Children were also predominately Caucasian and came from upper-middle class households where both parents attended college. In order to understand the development of situational knowledge of emotional experiences, researchers sampled the same children for a two-year period. During the course of the study, children were asked to manipulate four flannel faces which correlated to facial expressions shown by puppets. Children were also asked to explain the causes of the puppet's emotions as well as how they would feel in the given situation. To measure cognitive-language ability, parents completed an assessment scale relating to their children's cognitive and expressive language ability. Results indicated that older children received higher emotion situation knowledge scores as opposed to younger children. By the second year of the experiment, the children were able to generate more than one cause for a particular emotion. Finally, cognitive-language ability was significantly related to emotional understanding. In summary, Denham, Zoller, and Couchoud identified age and cognitive-language ability as potential factors influencing the development of situational knowledge of emotions.

Another study focusing on how children come to understand situational determinants of emotions was by Gnepp (1989). To assess children's knowledge of emotions in situations, Gnepp examined children's ability to discuss personal information when predicting someone else's emotions in a particular situation. Children ranged in age from five to eight. Although young children understood that not everyone will experience the same emotion in a particular situation, they were not able to effectively use personal information to predict someone else's emotions. In contrast, older children were able to use personal information as a way to predict another person's emotional response to a given situation (Hubbard & Coie, 1994). In conclusion, studies conducted on emotional cognition focus on children's abilities to identify emotional states and understand the situational determinants of emotional expressions.

Regulating emotions is a key aspect in emotional development and has received considerable attention from researchers over the last two decades. In particular, researchers have been interested in how children manipulate their emotional experiences in response to changing situational demands. For instance, Meerum, Terrwogt, Koops, Oosterhoff, and Olthof (1986) discovered that children were able to alter their emotional responses to a story depending on if they were asked to feel sad or not. Following these instructions, children were then asked to elaborate on the ending of the story. If the children were asked to feel sad, they completed the story in a negative way as compared to the children who were asked not to feel sad. When the researchers asked the children what they did to follow the directions, the children in the sad condition told the

researchers that they related the story to a similar or worse experience in their lives or they identified with the protagonist of the story. In contrast, the children in the non-sad condition stated that they reminded themselves that it was a fictional story. As a result, they were able to avoid feeling sad and finished the story in a positive way (Hubbard & Coie, 1994). Thus, children manipulated sadness depending on the situational context that they were given.

Research in emotional regulation continued with investigations involving peer relationships. In essence, children must be able to manage intense emotional experiences such as anger in order to develop and maintain positive peer relationships. Although definitions of anger vary, Fabes and Eisenberg (1992) decided to define anger as an emotional state facilitated by social frustration and threats. Fabes and Eisenberg examined coping strategies employed by preschool children during anger situations. Participants were predominately Caucasian and were from middle-class households. For a three-month period, children were observed during free play periods at an undergraduate laboratory. Observers recorded various anger cues such as facial, voice, and other aggressive behaviors (i.e., hitting). Results indicated that coping strategies varied in response to the precipitating cause of anger. For example, if the cause of anger related to another child taking away a toy, then the angered child would attempt to retrieve the toy. However, if the cause of anger related to another child pushing the target child off a swing, then the target child would either try to find an adult or respond with aggressiveness. Fabes and Eisenberg also found differences between socially competent/popular children and aggressive children. Socially competent children were relatively unobserved during anger conflicts as compared to their aggressive counterparts. When conflicts emerged, socially competent children responded by dealing with those situations directly and in a non-aggressive manner such as expressing their disapproval to the perpetrator. Conversely, aggressive children responded to anger situations with aggression, seeking revenge, venting, and/or seeking adult assistance (Fabes & Eisenberg, 1992).

Besides studying how children control their anger during simulated situations in laboratory settings, researchers have also studied how children control their anger during natural settings such as social play. Hubbard, Coie, and Dodge (1993) detected differences between nine-year old males during transition play periods. Specifically, researchers found that socially competent males were able to make an adjustment between rough and tumble play to a calmer and less intense play as compared to aggressive males who responded to the play shift by isolating themselves. These different responses may reflect the ability to control increasingly intense emotional experiences such as excitement and anger which surface during rough and tumble play. As a result of managing their emotions, the socially competent males were able to make the adjustment form rough to calmer play whereas aggressive males, being unable to manage their emotions, could not make the necessary adjustment (Hubbard & Coie, 1994).

Another study verifying adjustment differences between children during social play was by Shields, Cicchetti, and Ryan (1994). For six weeks, these researchers observed children during semi-structured and structured play periods at a summer camp.

Children ranged in age between eight to twelve years. There were no socioeconomic differences or differences in regards to growing up in a single parent or two parent household among the children. However, children were classified as maltreated or not depending on their exposure to physical or social abuse and neglect. Observations were made during small group interactions that were directed by a guidance counselor. To provide additional support, counselors were asked to complete a behavior checklist for each group member. Observations and guidance counselor ratings revealed that the maltreated children were less able to regulate their emotions as compared to the non-maltreated children. During play periods, maltreated children were observed engaging in disruptive and non-compliant behaviors whereas non-maltreated children were not observed engaging in such behaviors. Finally, gender differences were also detected with males displaying more externalized behaviors (i.e., aggression) than girls who displayed more cooperative behaviors during play periods (Shields, Cicchetti, & Ryan, 1994). In summary, children must manage increasingly complex and emotionally arousing situations in order to be well-liked and to be seen as a good play partner (Hubbard & Coie, 1994).

Managing personal anger is essential in creating and maintaining positive relationships, especially with peers. Yet, managing being the target of another person's anger is equally important in achieving a positive social life. Murphy et al. (1997) studied the reactions of preschool and kindergarten children when they were the targets of a peer's anger as well as individual differences in emotionality (i.e., intensity) and social functioning. Children ranged in age between four to six years. Although the children were predominately Caucasian, there were some children from Asian and African American backgrounds. This study was divided into three parts: individual interviews, teacher and maternal ratings of emotionality and regulation, and classmates' ratings on popularity and the frequency in which the participant engaged in anger conflicts. Individual interviews involved vignettes portraying high and low levels of a peer's anger in response to something the participant said or did. Researchers coded responses to the peer's anger as either friendly or assertive. Overall, children's emotionality and social functioning were associated with how they responded to being the target of a peer's anger. To illustrate, males, who reacted to the peer's anger with friendly responses, were rated high in regulation and socially appropriate behavior and low in emotional intensity, non-constructive coping, and aggressiveness by teachers and mothers. Conversely, teachers rated males, who reacted to the peer's anger with assertive responses, high in aggressive behavior. Similar to Fabes and Eisenberg (1992), popular children were involved in less anger conflicts. Finally, classmate reports on the frequency in which the participant engaged in anger conflicts were associated with teacher ratings of non-constructive coping, high emotional intensity and aggressiveness, and low in regulation and socially appropriate behavior.

Along with investigating how children manage their anger during conflicts involving peers, researchers have also investigated how children manage their anger during conflicts involving adults. Underwood, Coie, and Herbsman (1992) examined

display rules for anger and aggression. Children were predominately African American and were in grades three, five, and seven. Display rules for anger and aggression were assessed through personal interviews. Interviews were conducted around vignettes depicting anger situations between students and teachers. After describing the vignette, researchers asked the participants what they would do and why they chose a particular response. Findings indicated that younger females would not verbally express anger towards teachers whereas their counterparts did. However, older females would verbally express anger toward teachers whereas older males did not. Moreover, aggressive children did not use any display rules for anger as compared to non-aggressive children. Overall, children reported that they would replace their anger with sadness, because they didn't want to get into trouble and to keep social norms in tact.

The final area of research in emotional regulation entails investigating individual differences in emotional expression. To illustrate, Eisenberg et al. (1995) examined gender differences in social functioning, emotionality, and regulation among elementary school children. Participants were in grades kindergarten, first, and second. Also, students were predominately Caucasian, middle class, and came from two parent households. In order to measure social functioning, teachers completed an assessment scale that focused on the display of socially appropriate and socially inappropriate behaviors for each student. Additional data was collected through maternal ratings of their children's problem behaviors. Emotionality was assessed through teacher and maternal ratings on the child's emotional intensity. To measure regulation, teachers and mothers completed a scale that concentrated on coping styles. Results indicated that girls scored higher in teacher reports of socially appropriate behavior as opposed to boys. This finding is similar to the observations made by Shields, Cicchetti, and Ryan (1994) where girls were observed engaging in more cooperative and helpful behaviors than boys. Instead, boys were observed engaging in more externalized behavior problems and aggression (Shields, Cicchetti, & Ryan, 1994). Finally, girls scored lower in maternal ratings of problem behaviors and higher in maternal reports of behavior regulation and teacher's constructive coping styles as compared to boys (Eisenberg et al., 1995).

Besides gender differences, researchers have also found age differences in emotional expression and regulation. For instance, Underwood, Coie, and Herbsman (1992) reported that older children were aware of the display rules for anger. Thus, older children were able to mask their anger during situations where they became angry with their teachers. Conversely, younger children were not aware of the display rules for anger. As a result, younger children expressed their anger verbally and were reprimanded by their teachers for doing so. In regards to regulation, Fabes and Eisenberg (1992) discovered that older children were more likely than younger children to directly deal with anger conflicts rather than escaping them. Finally, older children were less likely to seek adult assistance when anger conflicts aroused. To conclude, research in emotional regulation focuses on children's abilities to manage their emotional experiences in response to changing environmental conditions.

A majority of the research conducted in the field of social development focuses on the processing of social information and the selection of behavioral responses. In processing social information, children must correctly interpret facial expressions. For

instance, Custrini and Feldman (1989) discovered that socially competent children were able to accurately encode and decode facial expressions for happiness, sadness, anger, disgust, and fear/surprise as compared to less socially competent children. While investigating children's ability to understand and regulate their own emotional experiences, Casey (1993) found gender differences in the ability to interpret facial expressions with more females accurately interpreting facial expressions than boys (Hubbard & Coie, 1994). To conclude, one area of social information processing concentrates on children's ability to accurately interpret facial expressions.

In addition to detecting emotional experiences through processing facial expressions, children must be able to process social intentions. To illustrate, Dodge and Price (1994) investigated children's ability to accurately process hostile and non-hostile cues from peers. Participants were from grades one, two, and three and came from various elementary schools in the mid-South. Children also came from different racial and socioeconomic backgrounds. Children were shown videotapes depicting the following problematic events: peer-entry (child initiates play with others and is rejected), peer-provocation (protagonist is provoked by a peer), and authority-directive (protagonist is directed by an adult to engage in an unpleasant behavior). After watching these clips, children were individually interviewed concerning how they interpreted the situation and what they would do or say if they were in the situation. Additional data was collected through teacher and peer reports of the child's behavior (i.e., socially competent). Findings indicated that high peer-group entry was associated with behavior competence in both teacher and peer ratings. In general, children who scored high in behavior competence were seen as being able to correctly encode social cues and to respond to problematic events in non-aggressive ways. Overall, older children processed hostile and non-hostile cues more accurately than did the younger children. Finally, Dodge, Murphy, and Buchsbaum (1984) found that popular children processed social intentions of peers more accurately than other children (Hubbard & Coie, 1994).

Another research area in social development concerns the selection of behavioral responses. Erdley and Asher (1996) hypothesized that children's social goals and self-efficacy perceptions influenced their selection of behavioral responses. Children from six elementary schools in two mid-Western cities participated. In addition, the average age was nine years. To measure social goals, children were presented with a list of aggressive, withdrawn, and prosocial goals and they were asked to rate the extent to which they agreed or disagreed with the goals as well as which goals they would most likely pursue in a given situation. In assessing self-efficacy perceptions, children rated the extent to which they agreed or disagreed with how well they would be able to achieve selected goals if they tried. After being presented with a number of same gender hypothetical situations, children rated how they would respond to the situation according to six randomly ordered behavioral alternatives (aggressive, verbal aggressive, passive, avoidance, problem-solving behavior, and request for clarification about why the situation occurred). Responses were coded according to what behaviors the participant would most likely do first. Further data was gathered through peer assessment of the participant's daily behavior. Overall, behavioral responses were consistent with the child's social goals and self-efficacy perceptions. For instance, aggressive children gave

high ratings to antisocial goals such as making the other person feel bad and low ratings for prosocial goals such as working things out peacefully. Finally, the pursuit of a particular social goal was highly correlated with self-efficacy. Thus, aggressive children selected more aggressive responses, because they believed that they were more likely to succeed antisocially as opposed to prosocially. In summary, children's behavioral responses were strongly related to how they perceived the situation as well as their beliefs in their abilities to successfully resolve the situation.

Erdley and Asher's findings can also be applicable to real-life situations. For example, Eisenberg, Fabes, Minore, et al. (1994) discovered that preschool children, who enacted friendly responses to hypothetical conflict situations with peers, relied on constructive verbal objections during actual anger situations with peers as opposed to physical retaliation (Murphy et al., 1997). Perhaps, the preschool children chose constructive verbal objections to anger situations involving peers, because they believed that they could remedy the situation better by selecting a prosocial alternative as compared to an antisocial alternative. In contrast, Shields, Cicchetti, and Ryan (1994) found that maltreated children engaged in aggressive, disruptive, and noncompliant behaviors during group activities at a summer camp. Possibly, the maltreated children chose to engage in aggressive and problematic behaviors, because they did not believe that they could interact with their peers in a prosocial manner. Therefore, these findings provide additional validity to Erdley and Asher's findings.

*Intervention Studies*

As research in emotional and social development progressed, researchers began to implement empirical findings in the educational system by creating social and emotional learning programs (SEL). The goal of any social and emotional learning program is to enhance children's abilities to understand, manage, and express the social and emotional aspects of their lives in ways that will facilitate positive outcomes in life such as learning, developing close relationships with others, solving daily problems, and adapting to the increasingly complex demands of growth and development (Elias et al., 1997). By promoting social and emotional learning programs in schools, educators and researchers aspire to minimize emotional and behavioral problems that interfere with the learning process and the development of positive peer relationships (Henrich, Brown, & Aber, 1999). Without intervention, researchers have found that children who experience difficulties in regulating their emotional experiences early in their schooling, continue to experience academic, emotional, and behavioral difficulties later on in life (Huffman, Mehlinger, & Kerivan, 2000). Specifically, researchers have found that early emotional and behavioral problems lead to school failure, dropout, depression, low self-esteem, involvement in delinquent lifestyle during adolescence, peer and teacher rejection, and vocational problems (Kamp & Tankersley, 1996). This section of the report will be divided into three parts: overview of the different types of programs, general instructional methods used in intervention programs, and individual programs.

Over the past three decades, numerous types of school programs emerged to replace children's disruptive behaviors with socially appropriate behaviors. Beelman, Pfingsten, and Losel (1994) compared the effectiveness of five different types of behavioral and cognitive school-based intervention programs. Each type of program was

designed to promote socially appropriate behaviors in the following student populations: externalizing syndromes (aggressiveness/conduct disorders), internalizing syndromes (socially withdrawn/depressed), intellectual problems (learning disabilities/mental retardation), at-risk (social deprivation), and normal. In regards to programs, researchers contrasted the following: social-cognitive skills (social-problem solving/perspective taking), social interaction skills (ratings of actual social behavior), social adjustment (problems scores and ratings of aggressiveness or popularity), self-related cognition/affects (self-concept and control beliefs), and academic achievement (school performance). Results indicated that social-cognitive programs were the most effective in decreasing problem behaviors and increasing social skills. In addition, social interaction programs were classified as moderately effective and social adjustment programs were classified as minimally effective. However, self-related cognition programs and academic achievement programs were the most ineffective programs at reducing problem behaviors and promoting socially appropriate behaviors.

Although programs differ in length and in activities appropriate to grade levels, most programs use some general instructional methods. The general instructional methods include the following: role-playing, group discussion, storytelling, and goal setting. One of the most common instructional methods found in social and emotional learning programs is role-play. Through role-play, children gain insight into another person's thought and emotions. With this knowledge, children can then select appropriate behavioral responses (i.e., gestures and expressions) that will foster and maintain positive relationships. Likewise, large and small group discussions allow children to discuss their emotions about a particular topic and to solve problems. Storytelling is most often used to introduce lessons, but storytelling can also be used during small group activities to facilitate the discussion of emotional experiences. Finally, goal setting is incorporated into lessons where students must monitor and evaluate their emotional experiences. For example, a student may select an anger management goal not to push someone who makes him or her angry. Instead of pushing the person, the student may decide to engage in an activity that reduces the anger. To conclude, many social and emotional learning programs rely on general instructional methods to accomplish their objectives (Elias et al., 1997).

One of the most cited and successful social and emotional learning programs is the Promoting Alternative Thinking Strategies Program (PATHS). PATHS was designed to enhance self-control, emotional awareness and understanding, and social problem-solving for both regular and special education students (Greenberg, Kusche, Cook, & Quamma, 1995). The basic premise of the program was that children's thoughts and actions are influenced by their emotional awareness. Thus, optimal development depends on increasing emotional competencies (Henrich, Brown, & Aber, 1999). In order to measure the effectiveness of the program, pre and post-test scores were compared between the experimental and control groups. Both groups contained a number of regular and special education students. Special education students were classified according to the following categories: learning disabilities, mild mental retardation, severe behavioral disorders, and multiple handicapped. Pre-test ages ranged from seven to ten years and the post-test ages ranged from eight to eleven years. In addition, participants were

predominately Caucasian. The test measure was the Kusche Affective Interview (KAI-R) which estimated emotional understanding into five domains: the ability to discuss personal emotional experiences, the ability to recognize emotions, the ability to recognize the simultaneity of emotions, the ability to understand display rules, and the ability to understand how emotions change (Greenberg, Kusche, Cook, & Quamma, 1995).

After a brief teacher-training period, the sixty-session program was implemented. The program was divided into three main units: Self-control, Emotions and Relationships, and Social Problem-Solving. In the first unit, students learned about a young turtle who developed better self-control. The second unit consisted of several topics including the following: learning about different emotional states, learning how to recognize one's own emotions as well as the emotions of others, how one's emotions can change, and how one's emotions affects others. Finally, in the third unit, children learned how to regulate their emotional experiences by learning and practicing the Control Signals Poster (CSP). Basically, the CSP reflects a traffic signal notion that allows children to be able to recognize the severity of their emotional experiences and to evaluate their actions (Henrich, Brown, & Aber, 1999).

The PATHS lessons were taught three times a week for 20-30 minutes. Each lesson was sequenced according to increasing developmental difficulty (Greenberg, Kusche, Cook, & Quamma, 1995). The instructional methods included the following: group discussion, work sheets, role-playing, and teacher modeling (Henrich, Brown, & Aber, 1999). Results indicated that both regular and special education students increased their vocabulary words reflecting emotional states as a result of the intervention. In regards to the discussion of personal emotional experiences, special education students were more able to understand and relate to basic emotions. However, special education students were not able to understand and relate to more complex emotions. Regular students improved in their ability to understand and relate to more complex emotions. Furthermore, regular students were more adept in understanding the simultaneity of emotional experiences as compared to special education students. Both regular and special education students understood display rules with significant improvements being shown by the special education students. Finally, both regular and special education students improved in their ability to understand how feelings change with significant improvements being made by the special education students. In conclusion, the PATHS program demonstrates that regardless of their academic placement, students can improve in their abilities to understand, express, and manage their emotional experiences (Greenberg, Kusche, Cook, & Quamma, 1995).

Even though most intervention programs focus primarily on enhancing children's social competence, they indirectly promote emotional competence. To illustrate, Battistich, Solomon, Watson, Solomon, and Schaps (1989) developed a five-year intervention program aimed at improving children's prosocial behaviors (i.e., understanding others, concern for the welfare of others, and increase the awareness to balance one's needs with those of others) as well as improving their cognitive-social-problem-solving strategies. Participants were from grades kindergarten through fourth and came from six different elementary schools. Random selection was used to determine which three schools would receive the intervention program. The remaining schools served as the control group. In addition, every participant was classified as a regular education student and came from middle to upper class households. After

training teachers on the use of cooperative learning activities as well as small group activities to foster social understanding, the program was implemented. During the course of the program, observers blind to the intervention recorded the frequency and quality of various classroom behaviors and activities that they witnessed during a two hour visit. Additional data was collected through individual interviews during the spring of each year and through peer ratings of acceptance. Individual interviews focused on problem-solving strategies to hypothetical situations involving peer conflicts. Overall, findings demonstrated that the participants in the intervention program received significantly higher scores than the control group in considering another person's needs. Finally, participants in the intervention program were found to use more prosocial strategies and use less antisocial strategies as compared to students who did not receive the intervention.

Another program that focuses on enhancing children's social competence while also indirectly improving children's emotional competence was the Resolving Conflict Creatively Program (RCCP). The RCCP program was designed to help children develop interpersonal negotiation strategies that would lead to constructive and positive relationships with others instead of aggression and violence. In addition, the program was implemented in grades first through twelfth at various public schools in New York City. Interestingly, the program was in place in different New York City school districts for over a decade. Similar to other programs, teachers were trained prior to the implementation of the program. The program consisted of 51 lessons which were divided into six units: Communication, Expressing Feelings and Dealing with Anger, Resolving Conflicts, Fostering Cooperation, Appreciating Diversity, and Countering Bias. Moreover, the program contained a peer mediation component that allowed students to practice conflict resolution skills during lunch and recess. Finally, instructional methods included the following: role-playing, small group discussion, and brainstorming sessions.

To test for the effectiveness of the program, an independent research organization measured variations in children's exposure to the curriculum, teacher training, and the number of peer mediators for a two-year period. Three distinct profiles were created detailing the variations in teacher training, lessons taught, and the number of classroom mediators. The first profile (High Lessons Profile) consisted of teachers who received a moderate amount of training, taught many RCCP lessons, and had few classroom mediators. The second profile (Low Lessons Profile) consisted of teachers who received the most amount of training, taught the fewest RCCP lessons, and had the most classroom mediators. The final profile consisted of teachers who received no training, taught no RCCP lessons, and had a few classroom mediators. Findings revealed that the students in the High Lessons Profile scored significantly higher in the use of prosocial behaviors as well as in academic achievement as compared to the other two groups. Also, students in the High Lessons Profile scored significantly lower in comparison with the other two groups in the use of aggressive strategies, making hostile attributions, engaging in aggressive fantasies, and teacher-reported aggression (Henrich, Brown, & Aber, 1999). To conclude, students who received the most RCCP lessons showed an increase in their use of prosocial strategies for dealing with conflicts with others and a decrease in their use of antisocial strategies.

*Current Intervention Program*

Given that emotional and social intelligence evolve together and are interdependently related, the current intervention program was designed to enhance both emotional competence (involving the ability to correctly identify, understand, and express emotional states) and social competence (involving the ability to select socially appropriate behavior when confronted with a problem). In order to promote effectively emotional and social competence, a social-cognitive approach was used. As a result, instructional methods included the following: group discussion, role-play, sharing circles, and story telling.

Unlike other intervention programs, the program did not involve teacher training. Instead, the program was developed as a part of the school guidance program. Also in contrast with other intervention programs, participants were not predominately Caucasian. Finally, the program was tailored for a third grade inclusion classroom and was implemented in the 2000-2001 academic year.

After the year-long intervention program, it was hypothesized that students would be able to do the following: correctly identify the five basic emotional states (happy, sad, anger, loving, and scared), select socially appropriate responses to hypothetical social problems, and select appropriate anger management strategies.

## Method

Participants

Fifty-three students from two third grade classrooms in a northeastern, suburban elementary school in the United States participated. The sample consisted of 38 African Americans, 13 Caucasians, and 2 Hispanics. Of the fifty-three students, twenty-nine (13 males, 16 females) received the intervention program. Ages ranged from 8 years, 1 month to 9 years, 9 months, with a mean age of 8 years, 9 months. In addition, eighty-three percent (24) of the students were classified as regular education, seven percent (2) were classified as special education, and ten percent (3) were classified as gifted. The control classroom consisted of twenty-four (10 males, 14 females) students. Ages ranged from 8 years, 1 month to 10 years, 2 months, with a mean age of 8 years, 9 months. Also, ninety-two percent (22) of the students were classified as regular education and eight percent (2) were classified as special education. Overall, students came from lower to middle class households. Finally, two teachers volunteered to participate in the study and their classrooms were randomly assigned to the experimental and control group.

Apparatus

*Emotions Situations Questionnaire:*

The Emotions Situations Questionnaire was used to assess emotional understanding and the ability to identify emotions. The questionnaire was created by Schwartz and Weinberger (1980) and was modified by Wintre et al. (1990). The modified version was used in this study. The questionnaire consisted of ten sentences that might elicit a target emotion (See Appendix A). The five target emotions were the following: happy, sad, scared, loving, and anger. Responses were coded as follows: no = 1, not sure = 2, and yes = 3. Responses for each student were summed to establish an overall emotion identification score. Scores for each student ranged from 10 to 30 with 30 indicating the highest level of emotional understanding.

The Situation Analysis of Understanding and Expressing Emotions:

The Situation Analysis of Understanding and Expressing Emotions was developed to measure the self-management of emotional experiences and was created by the trainer. The questionnaire consisted of three hypothetical situations that might elicit either a prosocial or antisocial response (Appendix B). After the trainer read each situation aloud to the class, students were asked to respond separately to two behavioral alternatives. Responses were coded as follows: no = 1, not sure = 2, and yes = 3. Responses for each student were summed to create a composite prosocial and antisocial score.

*Anger Management Strategies:*

To measure the frequency of certain anger management strategies, a list consisting of fifteen various anger management strategies was created (See Appendix C). Only the students in the experimental group participated in the pre and post-assessment periods. Student responses were collected as a group and were recorded as "yes" if the students raised their hand for a particular strategy.

*Teacher Rating Scale*:

The Teacher Rating Scale was used to provide supplementary evidence of the effectiveness of the program. The Teacher Rating Scale contained items from both the Social Skills Rating System developed by Gresham and Elliot (1990) and The Teacher Rating Scale developed by Rubenstein and Fisher (1974). Overall, the scale consisted of thirty-eight items relating to various social skills and nineteen items relating to various problem behaviors (See Appendix D). Each item was rated on a five-point Likert-type scale (not at all descriptive = 1, a little descriptive = 2, somewhat descriptive = 3, descriptive = 4, and very much descriptive = 5). Both the experimental and control teachers were asked to rate six students of their choice in the two assessment periods.

Procedure

Prior to the development of the program, a social and emotional assessment scale was administered to four second grade teachers and four third grade teachers in June of the 1999-2000 academic year. The scale was divided accordingly: nine feeling items, five anger management items, seven decision-making items, and six perspective-taking items. Each item was rating on a five-point Likert-type scale (always = 1, almost = 2, almost never = 4, and never = 5). The results suggested a need for a program that focused on the target areas of the early assessment.

The fifty-two lesson program was implemented in one designated third grade classroom in September 2000 and ended in May 2001. The program consisted of five units which were the following: Listening, Feelings, Anger Management, Decision-Making, and Perspective Taking. Lessons were divided accordingly: Listening (9), Feelings (15), Anger Management (10), Decision-Making (12), and Perspective-Taking (4). There were also two introductory lessons to acquaint students with the trainer and the guidance counselor as well as the program itself. Finally, the lessons were taught in the mornings, two times per week, and lasted approximately 30-40 minutes.

In order to encourage active participation throughout the program, instructional techniques included the following: guided discussion, small-group discussion, role-plays, interactive games, and various worksheet exercises. To test for program effectiveness, The Emotions Situations Questionnaire and The Situational Analysis of Understanding and Expressing Emotions as well as the Teacher Rating Scale were administered to both

experimental conditions prior to the beginning of the program in September and after the program in May.

## Results

In order to assess pretreatment equivalence, between group t-tests were used to compare the experimental and control groups on various pre-test measures. Significant differences on several pre-test measures suggest a failure of randomization. As a result, subsequent analysis focused on the program participants, using within-subject t-tests to compare performance on pre-test and post-test measures.

Emotions Situations Questionnaire

Directionally adjusted items were totaled to create summary scores for the five emotion identification variables (happy, sad, scared, loving, and anger). Within-subject t-tests were performed to assess the effects of the program on student participants. A significant change in the ability to identify anger was found (pre-test $x = 2.22$, s.d. = .75 versus post-test $x = 2.72$, s.d. = .49; $t = 2.26$, $df = 17$, $p < .05$). No significant differences emerged on the remaining four variables (See Table 1).

Items were totaled to create an overall emotion identification score for each student. Independent t-tests were conducted to determine gender differences. A significant difference was found in overall emotion identification with females scoring higher than males on both the pre-test ($t(16) = 3.43$, $p < .003$) and the post-test ($t(16) = 3.79$, $p < .002$). Females were also able to identify correctly the following individual emotions more than males: loving, sad, and scared (See Table 2).

Situational Analysis of Understanding and Expressing Emotions

Directionally adjusted items were totaled to create two summary scores indicating responses to hypothetical situations for each participant (prosocial responses and antisocial responses). Within-subject t-tests were conducted to assess the effects of the program on student participants. A significant decrease in the selection of prosocial responses was found (pre-test $x = 7.94$, s.d. = 1.43 versus post-test $x = 6.89$, s.d. = 1.97, $t = 2.19$, $df = 17$, $p < .05$). No significant gender differences were detected in either the pre or post-test.

Anger Management Strategies

Chi square analyses were conducted to determine the likelihood of students' using a particular strategy during the pre-test and post-test assessments. As illustrated in Table 3, during the pre-test periods, students endorsed the following strategies at rates exceeding chance: get back at the person (1, N = 21; chi square = 3.86, $p < .05$), call the person names (1, N = 21; chi square = 3.86, $p < .05$), and use the silent treatment (1, N = 21; chi square = 13.76, $p < .001$). Conversely, students were unlikely to talk with the person who made them angry (1, N = 21; chi square = 5.76, $p < .05$). No significant differences were discovered on the remaining eleven strategies.

In the post-test, students were significantly likely to use the following strategies: get the person back (1, N = 21) = 5.76, $p < .02$) and call the person names ( 1, N = 21) = 10.71, $p < .000$). In contrast, students were not likely to use the following strategies: insult the person (1, N = 21) = 8.05, $p < .01$), use the silent treatment (1, N = 21) = 3.86, $p < .05$), or talk with the person who made them angry (1, N = 21) = 8.05, $p < .01$). No significant differences were found on the remaining ten strategies (See Table 3).

Gender differences were not recorded in both testing conditions. Therefore, no analyses of gender differences were possible.

Teacher Rating Scale

Two summary scores based on teachers' rating of social skills (ss) and problem behaviors (pb) were calculated for a random subset of experimental participants by adding relevant items. A within-subject t-test failed to detect a significant difference on either the social skills or problem behaviors ratings when the pre and post-test scores were compared (See Table 4).

## Discussion

The results of the present investigation offered partial support for the hypothesis that participation in the program would enhance students' capacity to identify emotional states accurately. Students were better able to identify anger following their involvement in the program. Most likely this increase can be attributed to their exposure to the anger management unit. In addition, students may have become comfortable with the trainer and felt more open to express their "true" feelings instead of hiding them. However, they were less likely to identify the emotion "scared." Perhaps students were reluctant to acknowledge feeling scared in the group context used for data collection. Although participants completed their questionnaires individually, the proximity to their peers may have made them hesitant to report this emotional state. Finally, the questionnaire items that related to the emotion of "scared" may not have been representative of real-life situations that might have elicited a scared response. In summary, the program was partially effective in enhancing students' ability to correctly identify emotional states. Similar to the findings of Wintre and Vallance (1994), females in this study were better able to correctly identify emotional states than males in both the pre and post-test. This gender difference may be due to several factors. For example, previous studies have demonstrated that females use language at an earlier age than males (Parke & Locke, 1999). Certainly, language facilitates a better understanding of one's emotional states. To the extent that females are using language more frequently than males, they are more likely to label and understand their emotional states. Parents may also play a role in influencing the observed gender differences. Perhaps, as Goleman suggests, parents are more likely to talk about emotions with their daughters than with their sons (1995). Again, discussions allow children to label their emotional experiences clearly. Perhap the less opportunity males have to participate in discussions, the more difficulty they will have in identifying their emotional states. Finally, prevailing social norms may amplify gender differences (Parke & Locke, 1999). If young girls are taught to be more emotionally expressive than males, then females may have an advantage in understanding and identifying their emotional states due to the greater practice that they have in expressing themselves, especially with same-sex peers. Conversely, if males are taught to suppress their emotions, they may have a difficult time in understanding and identifying what they are feeling due to the fact that they are spending a considerable amount of time hiding their emotions instead of expressing them.

The results failed to support the hypothesis that participation in the program would increase prosocial responding and reduce antisocial responding. Measurements problems may have affected these findings. Because the trainer designed the assessment scale for the purposes of this study, there was no previous evidence of its reliability and construct validity. The hypothetical situations comprising the measure may not have been representative of daily situations that the students encounter. In addition, the assessment was conducted in a group setting, which may have compromised its validity.

Although students responded to the situations individually, they may have been influenced by their peers to select certain responses. Before future researchers use this outcome measure, it would be important to establish its reliability and validity with an approximate sample of elementary school age children. In the future, possibly this assessment should be conducted through private individual interviews. Perhaps it would be even more beneficial to include a role-play during the individual assessment. Role-playing would indicate how well students learned the concepts and how well they could enact socially appropriate responses to conflict situations. To conclude, the failure to support the hypothesis may be attributed to a poorly constructed assessment scale and imperfections in testing procedure.

Based on the current findings, we cannot conclude that the program adequately influenced students' selection of appropriate anger management strategies. Although students reported that they were less likely to use the silent treatment when they became angry, they reported that they were more likely to resort to
getting the person back and calling the person names. Furthermore, following the program students still were not likely to talk with the person who made them angry. Specifically, the observed decrease in the students' use of the silent treatment may be attributed by the trainer's specific acknowledgement of using the strategy and subsequent discussions concerning the effects of using the silent treatment. Possibly insufficient instructional time was devoted to consideration of the other strategies. The decrease in the allocated instructional time was made in an effort to introduce the students to some more socially appropriate ways of dealing with anger, such as squeezing an "anger" ball. In accounting for students' reluctance to talk with the person who made them angry, students might not yet feel comfortable in using this particular strategy. Instead, students seem to have relied on more self-centered strategies for dealing with anger, such as calming down by listening to music. Also, the assessment procedure was done in a group, with students raising their hands to indicate their use of a particular strategy. As a result, the close proximity of the other students may have influenced their reporting of certain responses. Moreover, the assessment was not balanced in terms of the amount of socially appropriate and socially inappropriate strategies examined. In fact, the assessment contained more socially inappropriate strategies examined. In fact, the assessment contained more socially inappropriate strategies, and it was not modified to include new suggested strategies, such as the "anger" ball and use of the "I" message. Overall, the failure to address certain anger management strategies and the failure to modify the assessment procedure may have lead to results that did not support the hypothesis.

As mentioned earlier, the teacher rating scale was used to provide additional evidence of the effectiveness of the program. The findings failed to indicat that the program produced any significant effects on children's displays of social skills or problem behaviors. This failure to detect significant differences may be attributable to the fact that the teacher rated only six students rather than the entire class. The small sample size resulted in large standard deviations for items. As a result, the ability to detect a significant change may have been compromised. In the future, the number of items should be condensed in effort to ease the teacher's task in rating the entire class. Finally, given that students rotate between classrooms during the day, it would be beneficial to issue the scale to other teachers who are involved in the students' lives. Having

additional teachers complete the scale might improve the reliability and validity of the ratings.

A final limitation of this study involved the fact that the trainer gathered both the pre- and post-test data. The program gave participants the opportunity to become familiar with the trainer, who repeatedly expressed an open and accepting stance toward a wide range of emotional experiences and social responses to emotions. After being in the program, the participants may well have seen the trainer as fairly nonjudgmental and permissive. Thus, following training they may have felt considerably freer to be honest about how they would actually respond in various situations than prior to participating in the program. In contrast, students in the control group were unfamiliar with the trainer and may have chosen to report socially acceptable responses to questionnaire items. Finally, disparities in the post-test administration procedures across the experimental and control conditions probably affected the outcome of the study. While the teacher was absent during the class period when the data was being collected for members of the experimental group, the teacher remained present during the control group's data collection. This may have contributed to stronger demand characteristics for members of the control group, resulting in more social desirability response bias. This would have attenuated the chances of observing greater improvement in the program group that in the control group.

In addition to addressing the limitation that have been discovered previously, future studies should focus on the longitudinal effects of early intervention programs on children's emotional and social competence (Elias et. al., 1991). For example, do these programs provide children with effective strategies as they navigate through middle school and high school? At the same time, do these programs effectively reduce antisocial behaviors over the long-term? Future research should also be directed towards developing more comprehensive programs aimed at students with diverse educational needs and socioeconomic backgrounds (Beelmann, Pfingsten, & Losel, 1994). Most importantly, studies should explore the effectiveness of integrating emotional and social concepts throughout the educational curriculum (Hyson, 1994). By exposing children to emotional and social concepts in a variety of subject areas, students may be able to understand, identify, and relate to these concepts more than if they were taught these concepts in an isolated setting, such as through a guidance program. Finally, future studies should examine current assessment tools for evaluating intervention programs and develop more refined assessment tools, in order to provide a more consistent, sensitive, and meaningful evaluation of the effectiveness of emotional and social learning intervention programs.

## References

Battistich, V., Solomon, D., Watson, M., Solomon, J., & Schaps, E. (1989). Effects of an elementary school program to enhance prosocial behavior on children's cognitive-social problem-solving skills and strategies. Journal of Applied Developmental Psychology, 10, 147-169.

Beelman, A., Pfingsten, U., & Losel, F. (1994). Effects of training social competence in children: A meta-analysis of recent evaluation studies. Journal of Clinical Child Psychology, 23, 260-271.

Cassidy, J., Parke, R. D., Butkovsky, L., & Braungart, J. M. (1992). Family-peer connections: The roles of emotional expressiveness within the family and children's understanding of emotions. Child Development, 63, 603-618.

Cook, E. T., Greenberg, M. J., & Kusche, C. A. (1994). The relations between emotional understanding, intellectual functioning, and disruptive behavior problems in elementary school-aged children. Journal of Abnormal Psychology, 22, 205-219.

Custrini, R. J. & Feldman, R. S. (1989). Children's social competence and on-verbal encoding and decoding emotions. Journal of Clinical Child Psychology, 18, 336-342.

Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotion understanding. Developmental Psychology, 30, 928-936.

Dodge, K. A. & Price, J. M. (1994). On the relation between social information processing and socially competent behavior in early school-aged children. Child Development, 65, 1385-1397.

Eisenberg, N. et al. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. Child Development, 66, 1360-1384.

Eisenberg, N. et al. (1996). The relations of regulation and emotionality to problem behavior in elementary school children. Development and Psychopathology, 8, 141-162.

Elias, M. J. et al. (1991). The promotion of social competence: Longitudinal study of a preventive school-based program. American Journal of Orthopsychiatry, 6, 409-417.

Elias, M. J. et al. (1997). Promoting Social and Emotional Learning: Guidelines for Educators. Alexandria: Association for Supervision and Curriculum Development.

Erdley, C. A. & Asher, S. R. (1996). Children's social goals and self-efficacy perceptions as influences on their responses to ambiguous provocation. Child Development, 67, 1329-1344.

Fabes, R. A. & Eisenberg, N. (1992). Young children's coping with interpersonal anger. Child Development, 63, 116-128.

Goleman, D. (1995). Emotional Intelligence: Why it can matter more than IQ. New York: Bantam Books.

Greenberg, M. T., Kusche, C. A., Cook, E. T., & Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. Development and Psychopathology, 7, 117-136.

Henrich, C. C., Brown, J. L., & Aber, J. L. (1999). Evaluating the effectiveness of school-based violence prevention: Developmental approaches. Social Policy Report, 13, 1-18.

Hubbard, J. A. & Coie, J. D. (1994). Emotional correlates of social competence in children's peer relationships. Merrill-Palmer Quarterly, 40, 1-20.

Hyson, M. C. (1994). The Emotional Development of Young Children: Building an Emotion-Centered Curriculum. New York: Teachers College Press.

Jenkins, J. M. (2000). Marital conflict and children's emotions: The development of an anger organization. Journal of Marriage and Family, 62, 723-736.

Kamps, D. M. & Tankersley, M. (1996). Prevention of behavioral and conduct disorders: Trends and research issues. Behavioral Disorders, 22, 41-48.

Kelly, K. R. & Moon, S. M. (1998). Personal and social talents. PHI DELTA KAPPAN, 79, 743-746.

Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. Developmental Psychology, 25, 343-354.

Murphy, B. C. & Eisenberg, N. (1997). Young children's emotionality, regulation, and social functioning and their responses when they are targets of a peer's anger. Social Development, 6, 18-36.

Newman, P. R. & Newman, B. M. (1997). Childhood and Adolescence. Boston: Brooks/Cole.

Parke, R. D. & Locke, V. O. (1999). Child Psychology: A Contemporary Viewpoint. Boston: McGraw-Hill College.

Santrock, J. W. (2001). Adolescence (8th ed.). New York: McGraw-Hill.

Shields, A. M., Cicchetti, D., & Ryan, R. M. (1994). The development of emotional and behavioral self-regulation and social competence among maltreated school-aged children. Development and Psychopathology, 6, 57-75.

Underwood, M. K., Coie, J. D., & Herbsman, C. R. (1992). Display rules for anger and aggression in school-age children. Child Development, 63, 366-380.

Weiten, W. (1998). Psychology: Themes and variations (4th ed.). Boston: Brooks/Cole.

Wintre, M. G., Polivy, J., & Murray, M. A. (1990). Self-predictions of emotional response patterns: Age, sex, and situational determinants. Child Development, 61, 1124-1133.

Wintre, M. G. & Vallance, D. D. (1994). A developmental sequence in the comprehension of emotions: Intensity, multiple emotions, and valence. Developmental Psychology, 30, 1329-1344.